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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b)

Attorney Docket No. 082225.P2813D3 Total Pages 5

First Named Inventor or Application Identifier Annette Wagner

Express Mail Label No. EL034161877US

ADDRESS TO: **Assistant Commissioner for Patents**
Box Patent Application
Washington, D. C. 20231

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. X Fee Transmittal Form
(Submit an original, and a duplicate for fee processing)

2. X Specification (Total Pages 30)
(preferred arrangement set forth below)
- Descriptive Title of the Invention
- Cross References to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to Microfiche Appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claims
- Abstract of the Disclosure

3. X Drawings(s) (35 USC 113) (Total Sheets 11)

4. X Oath or Declaration (Total Pages 12)

a. ___ Newly Executed (Original or Copy)

b. X Copy from a Prior Application (37 CFR 1.63(d))
(for Continuation/Divisional with Box 17 completed) **(Note Box 5 below)**

i. ___ DELETIONS OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).

5. X Incorporation By Reference (useable if Box 4b is checked)
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. ___ Microfiche Computer Program (Appendix)

7. _____ Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
a. ____ Computer Readable Copy
b. ____ Paper Copy (identical to computer copy)
c. ____ Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

8. _____ Assignment Papers (cover sheet & documents(s))
9. _____ a. 37 CFR 3.73(b) Statement (where there is an assignee)
_____ b. Power of Attorney
10. _____ English Translation Document (if applicable)
11. __X__ a. Information Disclosure Statement (IDS)/PTO-1449
__X__ b. Copies of IDS Citations
12. __X__ Preliminary Amendment
13. __X__ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
14. _____ a. Small Entity Statement(s)
_____ b. Statement filed in prior application, Status still proper and desired
15. _____ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. __X__ Other: Express Mail Certification

17. **If a CONTINUING APPLICATION,** check appropriate box and supply the requisite information:
___ Continuation __X__ Divisional ____ Continuation-in-part (CIP)
of prior application No: 08/938,378

18. **Correspondence Address**
_____ Customer Number or Bar Code Label _____
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Attorney's Docket No. 082225.P2813D3 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent Application of:	
Wagner, et al.	Examiner: Not Yet Assigned
Application No.: Not Yet Assigned	Art Unit: Not Yet Assigned
Filed: Herewith	
For: GRAPHICAL USER INTERFACE FOR A PORTABLE TELEPHONE	
Which is a divisional of:	
Application No.: 08/938,378	
Filed: September 26, 1997	

Assistant Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Please enter the following amendments prior to examination of the present application:

IN THE CLAIMS:

Please cancel claims 1-34 without prejudice.

Please amend the claims as follows:

38. (Amended) A machine-implemented method of allowing a user to transmit a message in a portable telephone, the method comprising the steps of:

receiving data from a remote source;

monitoring the content of the data for predetermined content; and

in response to detecting the predetermined content, automatically entering a mode for allowing a user to transmit a message from the telephone.

39. (Amended) A machine-implemented method according to claim 38, wherein the step of automatically entering a mode for allowing a user to transmit a message from the telephone comprises the step of automatically selecting a message to be transmitted in response to detecting the predetermined content.

40. (Amended) A machine-implemented method according to claim 38, wherein the step of automatically entering a mode for allowing a user to transmit a message from the telephone comprises the step of automatically selecting a format of a message to be transmitted in response to detecting the predetermined content.

41. (Amended) A machine-implemented method according to claim 40, wherein the telephone is configured to send and receive electronic mail messages and to display received electronic mail messages to a user; and

wherein the step of automatically selecting a format of a message to be transmitted comprises the step of automatically selecting a form for an outgoing electronic mail message in response to detecting the predetermined content.

Please add the following new claims:

43. (New) A method according to claim 36, wherein the form is pre-configured to include a destination address.

44. (New) A portable telephone comprising:

a display device

means for receiving previously requested data from a remote source;

means for causing information representative of the previously requested data to be displayed on the display device;

means, responsive to a user input initiating a transmission mode, for automatically selecting a form for a message to be transmitted based on a content of the displayed information at the time the user input is received.

45. (New) A portable telephone according to claim 44, wherein the portable telephone is configured to send and receive electronic mail messages; and

wherein the means for automatically selecting a form for a message to be transmitted comprises means for automatically selecting a form for an outgoing electronic mail message based on a content of the displayed information at the time the user input is received.

46. (New) A method according to claim 45, wherein the form is pre-configured to include a destination address.

47. (New) A portable telephone comprising:

an input device;

a display device;

a transceiver configured to receive a communication from a remote source over a wireless link; and

a control circuit coupled to the display device and the receiver, the control circuit configured to cause information representative of the communication to be displayed on the display device, the control circuit further configured to detect a user input at the input device initiating a transmission mode, and further configured to respond to the user input by selecting a form for a message to be transmitted based on a content of the displayed information at the time the user input is received.

48. (New) A portable telephone according to claim 47, wherein the transceiver is configured to send and receive electronic mail messages over the wireless link; and

wherein the control circuitry is configured to automatically select a form for an outgoing electronic mail message based on a content of the displayed information at the time the user input is received.

49. (New) A portable telephone according to claim 48, wherein the form is pre-configured to include a destination address.

50. (New) A portable telephone communication device comprising:

a transceiver configured to transmit and receive voice information for a telephone conversation over a wireless medium, the transceiver further configured to receive non-voice third party data from a remote source;

an output device; and

control circuitry coupled to the transceiver and the output device, the control circuitry configured to output information representing the non-voice data to a user using the output device, wherein the non-voice third party data can be updated by the remote source in real-time.

51. (New) A wireless portable telephone according to claim 50, wherein the non-voice third party data is not associated with a telephone conversation.

52. (New) A wireless portable telephone according to claim 50, wherein the control circuitry is further configured to cause the output device to generate an output as a function of both the non-voice third party data from the remote source and data stored locally within the wireless portable telephone.

53. (New) A portable telephone comprising:

means for carrying out a two-way telephone communication over a wireless link

means for receiving non-voice data from a remote source;

means for monitoring the content of the data for predetermined content; and

means, responsive to detecting the predetermined content, for automatically entering a transmission mode for allowing a user to transmit an electronic mail message from the telephone.

54. (New) A portable telephone according to claim 53, wherein the means for automatically entering a mode for allowing a user to transmit an electronic mail message from the telephone comprises means for automatically selecting a message to be transmitted in response to detecting the predetermined content.

55. (New) A portable telephone according to claim 54, wherein the means for automatically entering a mode for allowing a user to transmit an electronic mail message from the telephone comprises means for automatically selecting a format of a message to be transmitted in response to detecting the predetermined content.

56. (New) A portable telephone communication device comprising:

a display device

a transceiver configured to carry out a two-way telephone communication and further configured to receive non-voice data from a remote source;

a control circuit coupled to the transceiver and the display device, the control circuit configured to detect predetermined content in the non-voice data, to enter a transmission mode for allowing a user to transmit an electronic mail message in response to detecting the predetermined content, and to automatically select a message to be transmitted in response to detecting the predetermined content.

REMARKS

Prior to examining the present application, please enter the above amendments. Claims 1-34 have been cancelled. Claims 38-41 have been amended. Claims 43-56 have been added. No new matter has been added.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 9/24, 199_9

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9/24/99
(Date signed)

UNITED STATES PATENT APPLICATION

FOR

Graphical User Interface for a Portable Telephone

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Graphical User Interface for a Portable Telephone

FIELD OF THE INVENTION

The present invention pertains to the field of portable communication devices. More particularly, the present invention relates to a user interface for a portable, hand-held telephone.

BACKGROUND OF THE INVENTION

Cellular telephones are widely used and are becoming increasingly more commonplace in society. As the state of the art in cellular telephones advances, there is a trend toward incorporating more features and more advanced functions into the devices. Unfortunately, while incorporating more functions into these devices can make them more versatile, it can also make them more difficult to use for many users due to the added complexity. Many users dislike learning to use electronic devices with many functions or do not have the time to do so. Accordingly, there is a need in the art for a portable cellular telephone which is capable of performing a wide variety of functions and which can be operated using an intuitive, easy-to-use user interface.

SUMMARY OF THE INVENTION

One aspect of the present invention is a portable telephone, which includes a transceiver for transmitting and receiving data, a display device, and control circuitry coupled to the transceiver and the display device. The control circuitry is configured to enable the portable telephone to send and receive electronic mail messages and voice messages. The control circuitry is also configured to cause a graphical user interface to be displayed, which allows the user to access both stored electronic mail messages and voice messages from the single display screen.

Another aspect of the present invention is a method of allowing a user to reply to a stored message. A user input selecting the message is received. In response to the user input, an appropriate reply mode is automatically entered based on the source of the message.

Another aspect of the present invention is a method of processing outgoing calls in a wireless handheld telephone communication device. User inputs specifying a destination telephone number are received for the purpose of initiating an outgoing call. In response to the user inputs, the destination telephone number is automatically referenced against a database to determine whether the destination telephone number is currently appropriate.

Another aspect of the present invention is a method of conveying current call information to a user in a portable telephone communication device. The communication device includes a display device. In accordance with the method, an animated indication of the duration of a telephone call is displayed on the display device.

Another aspect of the present invention is a wireless portable telephone comprising control circuitry, a transceiver coupled to the control circuitry for transmitting and receiving data over a wireless medium, and a display coupled to the control circuitry. The control circuitry is configured to automatically cause information to be scrolled across the display.

Another aspect of the present invention is a method, in a portable telephone, of allowing a user to transmit a message. In the method, previously requested data is received from a remote source. Information that is representative of the data is displayed on the display device. In response to a user input initiating a transmission mode, a form for a message to be transmitted is automatically selected based on the content of the displayed information at the time the user input is received.

Another aspect of the present invention is a method of allowing a user to transmit a message in a portable telephone in which data is received from a remote source. The content of the data is monitored for a predetermined content and when the predetermined content is detected, a mode is automatically entered to allow the user to transmit a message from the telephone.

Other features of the present invention will be apparent from the accompanying drawings and from the detailed description which follows.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 illustrates a portable telephone in accordance with the present invention.

Figure 2 is a block diagram of the internal components of the portable telephone of Figure 1.

Figure 3A illustrates a main menu screen of the portable telephone of the present invention.

Figure 3B is a diagram illustrating functional relationships between the various modes of the portable telephone.

Figure 4 illustrates a Universal Mailbox screen of the present invention.

Figure 5 illustrates a screen showing an electronic mail message.

Figure 6 illustrates a screen for selecting a reply to an electronic mail message in accordance with the present invention.

Figure 7 illustrates a screen displaying an advanced call control message.

Figure 8 illustrates a News & Info screen for accessing third party information.

Figure 9 illustrates a screen displaying third party information.

Figure 10 illustrates a screen displaying third party information in addition to locally stored information and ticker-tape information.

DETAILED DESCRIPTION

A portable telephone having an intuitive graphical user interface is described. In the following description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It will be evident, however, to one skilled in the art that the present invention may be practiced without these specific details. In other instances, well-known structures and devices are shown in block diagram or other symbolic form in order to facilitate description of the present invention.

Overview

The present invention includes a portable telephone that provides an advanced yet easy-to-use graphical user interface (GUI) using a high-resolution display. Figure 1 illustrates a portable, wireless telephone in accordance with the present invention. In one embodiment, the telephone 1 is a cellular telephone, which may be conventional except as provided otherwise in this description. The telephone 1 includes an earpiece 2 for outputting sound, a mouthpiece 3 for inputting sound, and a high-resolution display 4. As will be described below, the display 4 is used to present the GUI to the user of the telephone 1, using which the user can control all significant functions of the telephone. In one embodiment, the display 4 is a bit-mapped, gray-scale screen having a resolution of approximately 160 x 240 pixels at approximately 102 pixels per inch. The display 4 can be a liquid crystal display (LCD) or any other suitable type of display device. The phone 1 also includes a keypad 14, which includes standard alphanumeric keys, such as are found on many conventional telephones, and an extendible antenna 15 for

transmitting and receiving data over a wireless (e.g., cellular) connection. The telephone 1 also includes various other controls, some of which are used with the features to be described below. In particular, the telephone 1 includes Select buttons 5 and 6, a Scroll Up button 7, a Scroll Down button 8, a Back button 9, a Messages button 10, a Send button 11, a Volume/Scroll Up/Down button 12, and an End button 13.

Figure 2 illustrates a block diagram of the internal components of the present invention. Note that the diagram of Figure 2 is intended to be a conceptual diagram and does not necessarily reflect the exact physical construction and interconnections of these components. As shown in Figure 2, the telephone 1 includes processing and control circuitry 20, which controls the overall operation of the telephone. Coupled to the processing and control circuitry 20 are the display 4, memory 21, a transceiver 22, and inputs 23, a speaker 23, and a microphone 24. The speaker 23 is used to generate sound, which is output through the earpiece 2. The microphone 24 is used to receive sound through the mouthpiece 3. The transceiver 22, which is also coupled to the antenna 15, is used to transmit and receive (via antenna 15) data, including audio data and various other types of data (the nature of which will be described below). Note that in alternative embodiments, the transceiver 22 may be physically embodied as a separate transmitter and receiver. Inputs 23 represent buttons 5 through 14, in aggregate.

The processing and control circuitry 20 may include one or more of devices such as general-purpose microprocessors, digital signal processors (DSPs), application specific integrated circuits (ASICs), various types of signal

conditioning circuitry, including analog-to-digital converters, digital-to-analog converters, input/output buffers, etc.

The memory 21 may include one or more physical memory devices, which may include volatile storage devices, non-volatile storage devices, or both. For example, memory 21 may include both random access memory (RAM), read-only memory (ROM), various forms of programmable and/or erasable ROM (e.g., PROM, EPOM, EEPROM, etc.), flash memory, or any combination of such devices.

The present invention includes steps which, in various embodiments, may be carried out by elements of the processing and control circuitry 20 (e.g., a microprocessor or a DSP) executing sequences of instructions. The instructions may be stored in a memory, such as memory 21. Software instructions (or data) may be loaded into the portable telephone 1 from another device, such as a remote computer system, over the wireless connection. In various embodiments, downloaded software instructions may be directly supported by the telephone 1, in which case execution of the instructions may be performed directly upon their being received. In other cases, downloaded instructions may not be directly executable by the telephone 1. Under these circumstances, the instructions may be executed using an interpreter, which interprets the instructions, or by otherwise executing instructions which convert the received instructions to instructions that can be directly executed.

Certain embodiments of the present invention may be carried out by hard-wired circuitry, rather than by executing software, or by a combination of hard-wired circuitry with software. Hence, it will be recognized that the

present invention is not limited to any specific combination of hardware circuitry and software, nor to any particular source for software instructions.

Nonetheless, to facilitate description it is henceforth assumed that aspects of the present invention are generally carried out through the execution of software instructions in the telephone 1. It is envisioned that these instructions may be written in the Java™ programming language (hereinafter "Java") and, more specifically, in the PersonalJava™ subset of Java (hereinafter "Personal Java"), both developed by Sun Microsystems, Inc., of Palo Alto, California. Note, however, that other languages may be substituted within the scope of the present invention. As is well-known, Personal Java is a Java application environment designed specifically for network-connectable applications on consumer devices. The details of developing software in Java and Personal Java are well-known to those skilled in the relevant art and are not required for an understanding of the present invention. Accordingly, such details are not provided herein.

The use of Java has a number of advantages, including allowing the GUI to be hardware-independent. Moreover, various features and functions described herein can be added to the portable telephone 1 at virtually any time after the product is manufactured or purchased by simply downloading the appropriate instructions to the telephone 1 over the wireless connection.

The features of the GUI of the portable telephone 1 will now be described. Briefly, the GUI includes a "universal mailbox", which stores both electronic mail (e-mail) and voicemail messages in a common repository, and which allows the user to access both types of messages through a single display mode. An automatic reply ("auto-reply") feature allows a user to

automatically initiate a reply to either an e-mail message or a voicemail message with the touch of a button. An "advanced call control" feature automatically intercepts outgoing phone calls before they are completed, determines whether the dialed phone number is valid for the current time and date, and suggests alternative phone numbers when appropriate. A "ticker-tape" display automatically scrolls information across the display 4, the content of which is automatically selected based on context. An animated call duration indicator indicates the duration of the current phone call. Other features will become apparent from the description which follows.

Figure 3A illustrates the main menu screen of the GUI, according to one embodiment. This screen appears automatically after power-up, and the user can return to it at any time by pressing the End button 2. From the main menu screen, the user can access various functions provided by the telephone, including speed dial, e-mail and voicemail messages, an address book, news and information, and configuration settings. A selection bar 34 indicates the user's current selection. The main menu screen includes a ticker-tape display field 32, in which various types of information are scrolled horizontally. In the main menu screen, the content of this information is dependent upon the user's current selection. For example, if the category "Messages" is selected, as shown in Figure 3A, a listing of the senders of all unread messages will be scrolled horizontally through the ticker-tape display 32. For e-mail messages, the subject line of the messages will also be displayed. If the category "News & Info" is selected, a summary of news or other information contained in that category can be scrolled across the display 32. The information displayed in display 32 can be made to scroll repeatedly

until the user selects a different function. Other uses of the ticker-tape display 32 will be described below.

The main menu screen also includes an animated call duration indicator 31. In one embodiment, the indicator 31 has the appearance of an analog clock. In one embodiment, the "face" of the clock 31 appears to become progressively shaded with color as a telephone call takes place to indicate the duration of the call. Specifically, color shading is added to the face of the clock 31 radially, and in a clockwise direction, as the minute hand (or second hand) moves around the face of the clock. Color shading appears to sweep around the face of the clock 31 in a radial arc from the point on the clock which represents the time at which the call began. Hence, shading is added so as to give the appearance that the shading is actually being "applied" by the sweeping minute hand (or the second hand).

The main menu screen further includes a Sleep "soft button" 35 and a Go soft button 36. By selecting the Sleep soft button 35, the user can cause the display 4 to enter a sleep mode. By selecting the Go soft button 36, the user can go to the current selection from the menu screen.

The functions of the controls described in Figure 1 will now be described. Select buttons 5 and 6 are used to select soft buttons which may appear directly above them on the display 4 in certain modes. For example, referring again to Figure 3A, button 5 is used to select the Sleep soft button 35, and button 6 is used to select the Go soft button 36. Scroll buttons 7 and 8 are used to move a current selection up or down, for example to move selection bar 34 between the different categories. Back button 9 is used to access the previously displayed screen. Messages button 10 is used to directly access the

universal mailbox. Button 12 is used to adjust the volume up or down or to scroll the current selection up or down, depending upon the mode in which the telephone is operating (i.e., depending upon whether there is an active telephone connection). Send button 11 functions as a standard Send button such as found on many conventional cellular telephones. In addition, Send button 11 is used to dispatch an e-mail message or to initiate the auto-reply function (described below). End button 13 is used to access the main menu screen, as noted above, or to end a telephone call.

Figure 3B illustrates the functional relationships between the different modes/functions that a user can access using the GUI of the present invention. On power-up, the user initially encounters the main menu screen 40. From the main menu screen 40, the user can directly access speed dial mode 41, messages mode 42, address book mode 52, news and information mode 46, or settings mode 53. From the speed dial mode 41, the user can initiate telephone calls using previously-set speed dial numbers. The user can also dial any previously stored phone numbers 45 or access a redial function 43 to redial the most recently dialed phone number. By selecting the messages mode 42, the user is taken to the universal mailbox 44, which displays all stored e-mail and voicemail messages. The news and info mode 46 allows the user to access information received from a remote source over the wireless connection. The information accessible under the news and information category 46, which may be referred to as "third party" information, contains information on various topics, which may be user-specified. In the illustrated embodiment, the third party information includes information on the stock market 47, current traffic conditions 48,

current weather conditions 49, current headlines 50, as well as games 51. Note that the particular types of information stored in this category can be easily varied within the scope of the present invention. This information can be acquired by the portable telephone 1 in response to a specific user input, automatically at predetermined times or intervals, or whenever the transmitting source transmits the information.

The features of the present invention are described now in greater detail with reference to Figures 4 through 10. These features are described primarily in terms of the outputs that are perceivable to the user. The precise manner in which these functions are implemented, or "coded", is not important for an understanding of the present invention. Many implementations are possible within the scope of the present invention, and such implementations will be readily appreciated from this description by one skilled in the relevant art.

PCT/US98/00468

Universal Mailbox

Referring now to Figure 4, the universal mailbox screen is illustrated. As noted above, the universal mailbox feature causes both e-mail and voicemail messages to be displayed to the user using a single display mode; thus, both e-mail messages and voicemail messages can be viewed simultaneously from the same display screen, which can be scrolled, if necessary, to view a large number of messages. Each message is listed by the name of its sender, and the time and date of receipt. In addition, e-mail messages include the subject line of the message. E-mail messages are further distinguished by a letter-shaped icon to the left of the sender's name, while voicemail messages are identified by a telephone handset icon to the left the

sender's name. The time and date for each function can be set to be absolute or relative.

A user can read an e-mail message on the display 4 or listen to a voicemail message by selecting the message from the list and then pressing the Play button 37. When the user selects a message, the sender's address (in the case of an e-mail message) or telephone number (in the case of a voicemail message) appears in the ticker-tape display 32, although the information is not scrolled in that case. For an e-mail message, the e-mail message (or the portion of it which will fit in the display screen 4) is displayed, as shown in Figure 5.

Auto-Reply

The auto-reply function enables the user to generate a meaningful and quick reply to any message, regardless of whether it is an e-mail message or a voicemail message. If any message is currently selected and the user presses the Send button 11, the system will automatically enter an appropriate reply mode. More specifically, if the selected message is a voicemail message, the system will dial out using the telephone number of the sender of the message. Conventional Caller ID information, such as provided by many telephone services, can be used to ascertain the telephone number of the original sender. Also, the name of the original sender may be looked up in an electronic rolodex (which may or may not be stored within the telephone 1) using the Caller ID information and displayed to the user.

If, on the other hand, the selected message is an e-mail message, the system will automatically display a reply form addressed to the address of the sender when the Send button 11 is pressed. The user may then enter

appropriate text using the alphanumeric keypad 14. To dispatch the e-mail message, the user presses the Send button 11 again.

In one embodiment, when a user wishes to reply to an e-mail message, the system presents a menu of options for reply forms. These reply forms may be standard for the system (generic) or customized. As shown in Figure 6, a standard template of reply forms may include generic replies such as "Yes", "No", or "Call Me". Furthermore, a sender may explicitly provide a template including one or more reply forms. For example, a sender who is a stockbroker might send a template with the replies "Buy Company X", "Sell Company X", and "Call Me." In one embodiment, the user can further specify particular reply forms for individual senders. The auto-reply feature will automatically display the appropriate form (or choice of forms) for the particular sender when the Send button 11 is pressed while the message is selected. If there is no user-specified reply form for a particular sender, and the sender has not provided a reply form, the system will default to the generic template.

Advanced Call Control

The advanced call control feature increases the chances that a user will reach the person that he or she is trying to call with little additional effort on the part of the user. Often when a user makes a telephone call, his or her goal is to speak to a specific person and not to whomever happens to answer the telephone. Accordingly, the present invention includes an advanced call control function by which a user can create a profile for a person who is called often. The profile is stored in a database, which may be stored within the telephone 1 or in a remote system. In the profile, the user can assign one or

more telephone numbers to a specific person and specify the times and/or dates when each phone number is appropriate. For example, the user might specify that a given person should be called at his office telephone during the day on Monday through Friday, at his home telephone in the early evenings, and at his cellular telephone on the weekends. Accordingly, when the user dials out using one of these numbers (whether entered manually or using speed dial), the system will automatically reference the entered telephone number against the profile (database) to determine whether the number is "valid" (appropriate) in view of the current day and/or time. If the phone number is determined to be currently valid, then the dial out sequence is executed normally. If another number is determined to be more appropriate based on the profile, the system will automatically display a message, such as that shown in Figure 7, prompting the user to either choose an alternate number or confirm that the entered number should be used. If the alternate number is selected, the telephone 1 dials out using the alternate number. If the user does nothing in response to the prompt, the telephone completes the dial out sequence after a timeout period using the original number. Thus, the advanced call control feature increases the chances that a user will reach the person that he or she is trying to call with little additional effort on the part of the user.

Third Party Information

As noted above, the user can access various types of third party information provided from a remote transmission source. Third party information is information received by the telephone from a remote source over the wireless connection, which may include real-time information.

Third party information can be accessed from the "News and Info" screen, an example of which is illustrated in Figure 8. As noted, the user may be able to select from various topics, such as stock market information, traffic and weather conditions, or current headlines. Figure 9 shows an example of a simple display of stock market information. In one application, the system might be programmed to download only information relating to stocks that the user owns or stocks in which the user is specifically interested.

Third party information can also be combined with information stored locally in the telephone. For example, refer to Figure 10, which shows a screen displaying current information for a given stock, "Indigo Arts", received from a remote source, displayed together with the number of shares of the stock owned by the user, which is stored locally. The system further automatically computes and displays the percent gain on the user's current holdings of this stock, as shown.

Ticker-Tape Display

As noted above, the ticker-tape display 32 may be used to scroll various types of information to the user, including third party information (e.g., traffic, headlines, weather, etc.) or information stored locally in the telephone (e.g., e-mail and voicemail messages). For example, when the telephone is in the News and Info mode, the ticker-tape display 32 can be used to display real-time information relating to various topics, such as stock prices in the example of Figure 10.

Information scrolled in ticker-tape display 32 is automatically selected based on context, i.e., based on the information the user is currently viewing or the mode in which the telephone 1 is currently operating. For example, if

the user has selected stocks from the News and Info menu, then stock market prices may be scrolled through the ticker-tape display 32. If the user has selected "Traffic" from the News and Info menu, then current traffic information can be scrolled. If the user has selected Messages from the main menu, then summary information on the user's new messages is scrolled.

Interactive Forms

Another feature of the present invention allows an e-mail transmission to be automatically designed based upon context. For example, in one embodiment if the user presses the Send button 11 while viewing stock market information, the system may automatically display an e-mail form addressed to his or her stock broker. The specific content of the form can be designed to suit the user's needs.

In addition, third party information can be automatically monitored for the presence of previously-specified content, such as the price of a particular stock rising or falling to a specified level. In response to detecting this previously-specified content, the system automatically provides a notification to the user, such as an audible tone or a displayed message. Further, the system can automatically display a customized, ready-to-send e-mail message in response to detecting this information. For example, in response to detecting the price of a stock hitting a specified level, the system may automatically display a prewritten e-mail message addressed to the stockbroker requesting a purchase of the stock.

Thus, a portable telephone having an intuitive graphical user interface has been described. Although the present invention has been described with

reference to specific exemplary embodiments, it will be evident that various modifications and changes may be made to these embodiments without departing from the broader spirit and scope of the invention as set forth in the claims. Accordingly, the specification and drawings are to be regarded in an illustrative rather than a restrictive sense.

CLAIMS

What is claimed is:

1. A portable telephone comprising:

a transceiver for transmitting and receiving data;

a display device; and

control circuitry coupled to the transceiver and the display device, wherein the control circuitry is configured to enable the portable telephone to send and receive electronic mail messages and voice messages using the transceiver, wherein the control circuitry is further configured to cause a graphical user interface to be displayed on the display device, the graphical user interface allowing a user to access stored electronic mail messages and voice messages from a single display screen rendered on the display device.

2. A portable telephone according to claim 1, wherein the portable telephone is a cellular telephone of the hand-held variety.

3. A machine-implemented method of allowing a user to reply to a stored message, the method comprising the steps of:

receiving a user input selecting the message, the message having been received from a source;

in response to the user input, automatically entering an appropriate one of a plurality of reply modes based on the source of the message.

4. A method according to claim 3, wherein the message can be either an electronic mail message or a voice message.

5. A method according to claim 3, further comprising the step of receiving a reply form for the message, the reply form provided by a sender of the message.

6. A method according to claim 3, wherein the step of automatically entering an appropriate one of a plurality of reply modes based on the source of the message comprises the step of selecting a reply message.

7. A method of enabling a user of a portable communication device to reply to a stored message, the method comprising the step of transmitting sequences of instructions from a host processing system to the portable communication device, the sequences of instructions including instructions which, when executed on the portable communication device, cause the portable communication device to perform the method recited in claim 3.

8. In a wireless telephone communication device capable of receiving and storing electronic mail messages and voice messages, a method of allowing a user of the communication device to reply to a received message, the communication device including a display device, the method comprising the steps of:

displaying an indication of a stored message on the display device, wherein the stored message may be either an electronic mail message or a voice message, the stored message having a source identifier;

receiving a user input selecting the received message; and

in response to the user input, automatically entering an appropriate one of a plurality of reply modes based on the source identifier.

9. A method according to claim 8, wherein the step of automatically entering an appropriate one of a plurality of reply modes based on the source identifier comprises the step of automatically entering either an electronic mail reply mode or a voice reply mode based on the source identifier.

10. A method according to claim 9, wherein the source identifier comprises Caller ID information, and wherein the step of automatically entering an appropriate one of a plurality of reply modes based on the source identifier further comprises the step of using the Caller ID information to identify the source identifier as a telephone number.

11. A method according to claim 9, wherein the source identifier comprises a telephone number, and wherein the step of automatically entering an appropriate one of a plurality of reply modes based on the source identifier further comprises the step of:

receiving Caller ID information specifying the telephone number; and

automatically initiating a dial-out sequence using the Caller ID information in response to receiving the user input.

12. A method according to claim 8, wherein the step of automatically entering an appropriate one of a plurality of reply modes based on the source identifier further comprises the step of

identifying the source identifier as an electronic mail address; and

automatically selecting and displaying on the display device an appropriate reply form for the electronic mail address in response to the user input.

13. A method of enabling a user of a wireless telephone communication device to reply to a received message, the method comprising the step of transmitting sequences of instructions from a host processing system to the wireless telephone communication device, the sequences of instructions including instructions which, when executed on the wireless telephone communication device, cause the wireless telephone communication device to perform the method recited in claim 8.

14. In a wireless hand-held telephone communication device, a method of processing outgoing telephone calls, the method comprising the steps of:

receiving user inputs for initiating an outgoing call, the user inputs specifying a destination telephone number;

in response to the user inputs, automatically referencing the destination telephone number against a database to determine whether the destination telephone number is currently appropriate.

15. A method according to claim 14, outputting a message to a user according to whether the destination telephone number is determined to be currently appropriate.

16. A method according to claim 15, wherein the step of outputting a message to a user according to whether the destination telephone number is determined to be currently appropriate comprises the step of outputting the message prior to executing the outgoing call.

17. A method according to claim 16, the method further comprising the steps of waiting for a second user input before executing the call, wherein the second user input is in response to the outputting of the message.

18. A method according to claim 14, the database maintaining a plurality of telephone numbers and a set of times for which each of the telephone numbers is appropriate.

19. A method of enabling a wireless hand-held telephone communication device to process outgoing telephone calls, the method comprising the step of transmitting sequences of instructions from a host processing system to the communication device, the sequences of instructions including instructions which, when executed on the communication device, cause the portable communication device to perform the method recited in claim 14.

20. A portable telephone comprising:

means for receiving user inputs for initiating an outgoing call, the user inputs specifying a destination telephone number; and

means for accessing a database, the database including a set of telephone numbers and a set of times for which each of the telephone

numbers is appropriate, to determine if the destination telephone number is currently appropriate.

21. A portable telephone according to claim 20, further comprising means for outputting a message if the destination telephone number is determined not to be currently appropriate.

22. A portable telephone according to claim 20, further comprising:

a display device; and

means for generating a graphical user interface using the display device.

23. In a portable telephone communication device, a method of conveying current call information to a user, the method comprising the step of displaying an animated indication of a duration of a current communication session on a display device.

24. A method according to claim 23, wherein the animated indicator comprises a non-alphanumeric graphical representation.

25. A method according to claim 24, wherein the indicator has the appearance of an analog clock.

26. A method of enabling a portable telephone communication device to convey current call information to a user, the method comprising the step of

transmitting sequences of instructions from a host processing system to the communication device, the sequences of instructions including instructions which, when executed on the communication device, cause the communication device to perform the method recited in claim 23.

27. A wireless portable telephone comprising:

control circuitry;

a transceiver coupled to the control circuitry for transmitting and receiving data over a wireless medium; and

a display coupled to the control circuitry;

wherein the control circuitry is configured to automatically cause information to be scrolled across the display.

28. A wireless portable telephone according to claim 27, wherein the information comprises text information scrolled horizontally across the display.

29. A wireless portable telephone according to claim 27, wherein the telephone is operable in any of a plurality of modes, and wherein the control circuitry is further configured to select the content of the scrolled information according to a currently selected mode.

30. A wireless portable telephone according to claim 27, wherein the telephone is configured to receive messages using the transceiver and to store

the messages, and wherein the scrolled information comprises information indicating the presence of a received message.

31. A wireless portable telephone according to claim 30, wherein the scrolled information further comprises information identifying the source of the recorded message.

32. A wireless portable telephone according to claim 30, wherein the scrolled information further comprises information indicating the content of the recorded message.

33. A wireless portable telephone according to claim 27, wherein the scrolled information corresponds to data received from a remote source using the transceiver, the data previously requested by a user.

34. A wireless portable telephone according to claim 33, wherein the scrolled information is descriptive of the data received from the remote source.

35. A method of allowing a user to transmit a message in a portable telephone, the portable telephone including a display device, the method comprising the steps of:

receiving previously requested data from a remote source;

displaying information representative of the previously requested data on the display device;

in response to a user input initiating a transmission mode, automatically selecting a form for a message to be transmitted based on a content of the displayed information at the time the user input is received.

36. A method according to claim 35, wherein the portable telephone is configured to send and receive electronic mail messages; and

wherein the step of automatically selecting a form for a message to be transmitted comprises the step of automatically selecting a form for an outgoing electronic mail message based on a content of the displayed information at the time the user input is received.

37. A method of enabling a portable telephone to allow a user to transmit a message, the method comprising the step of transmitting sequences of instructions from a host processing system to the portable telephone, the sequences of instructions including instructions which, when executed on the portable telephone, cause the portable telephone to perform the method recited in claim 35.

38. A method of allowing a user to transmit a message in a portable telephone, the method comprising the steps of:

receiving data from a remote source;

monitoring the content of the data for predetermined content; and

in response to detecting the predetermined content, automatically entering a mode for allowing a user to transmit a message from the telephone.

39. A method according to claim 38, wherein the step of automatically entering a mode for allowing a user to transmit a message from the telephone comprises the step of automatically selecting a message to be transmitted in response to detecting the predetermined content.

40. A method according to claim 38, wherein the step of automatically entering a mode for allowing a user to transmit a message from the telephone comprises the step of automatically selecting a format of a message to be transmitted in response to detecting the predetermined content.

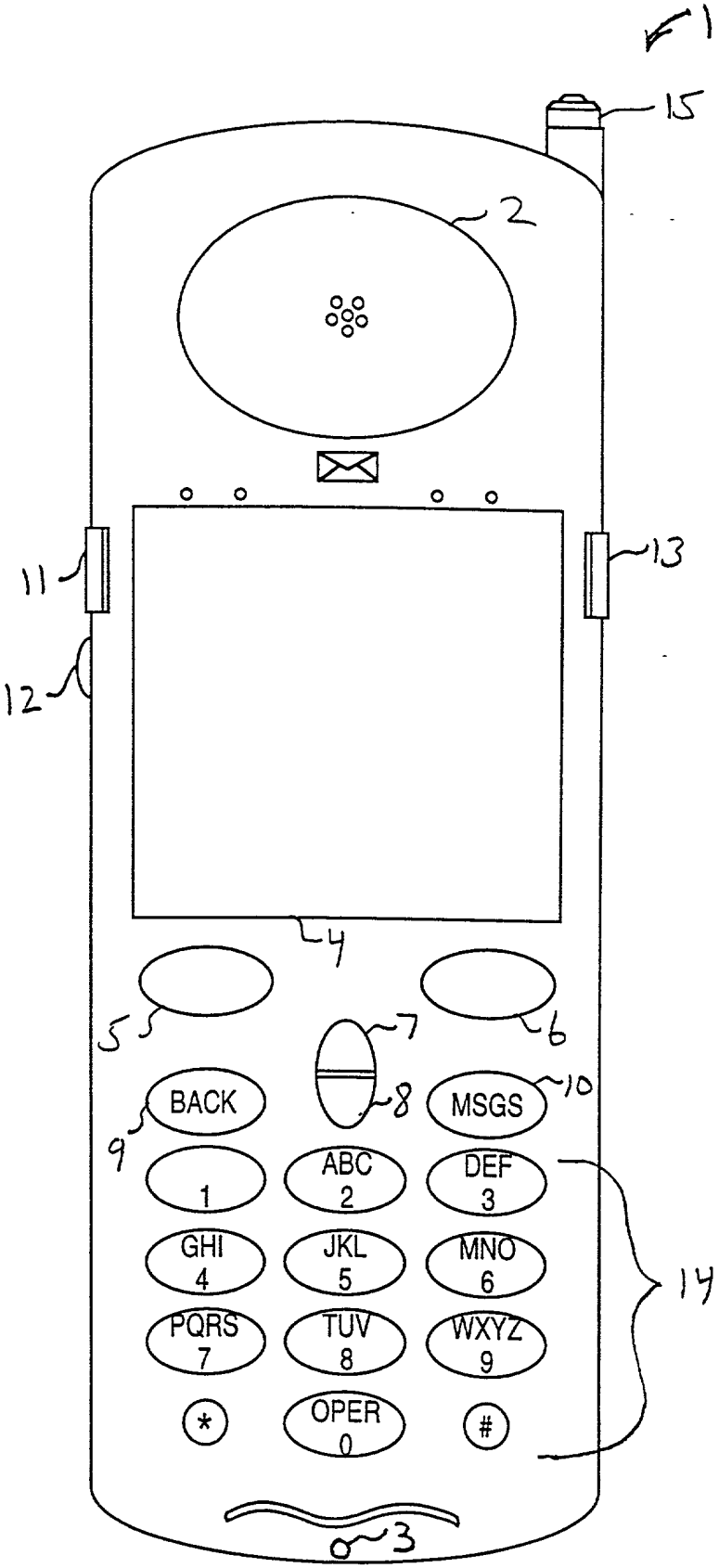
41. A method according to claim 40, wherein the telephone is configured to send and receive electronic mail messages and to display received electronic mail messages to a user; and

wherein the step of automatically selecting a format of a message to be transmitted comprises the step of automatically selecting a form for an outgoing electronic mail message in response to detecting the predetermined content.

42. A method of enabling a portable telephone to allow a user to transmit a message, the method comprising the step of transmitting sequences of instructions from a host processing system to the portable telephone, the sequences of instructions including instructions which, when executed on the portable telephone, cause the portable telephone to perform the method recited in claim 38.

ABSTRACT OF THE DISCLOSURE

A portable telephone provides a graphical user interface (GUI) using a high-resolution display. The GUI provides a Universal Mailbox for storing both electronic mail and voicemail messages, either of which can be accessed by a user from the same display screen. An automatic reply feature allows a user to initiate an outgoing reply to a received message with the touch of a button. For a reply to a voicemail message, the GUI accesses Caller ID information to automatically identify and dial out to the phone number of the sender of the original message. For an electronic mail reply, the GUI automatically displays a reply form addressed to the source address. Reply forms may be generic, custom designed for a specific source address, or provided by the sender. An advanced call control feature automatically checks an outgoing telephone number against a database to determine whether the phone number is currently appropriate. Alternative or more-appropriate phone numbers may be retrieved from the database and suggested to the user. An animated call duration indicator indicates the length of telephone calls. A ticker-tape display automatically displays scrolled text messages according to the context of what the user is doing.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15
2
11
13
12
4
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6
7
8
BACK
9
MSGS
10
1
ABC 2
DEF 3
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MNO 6
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14
3

FIG. 1

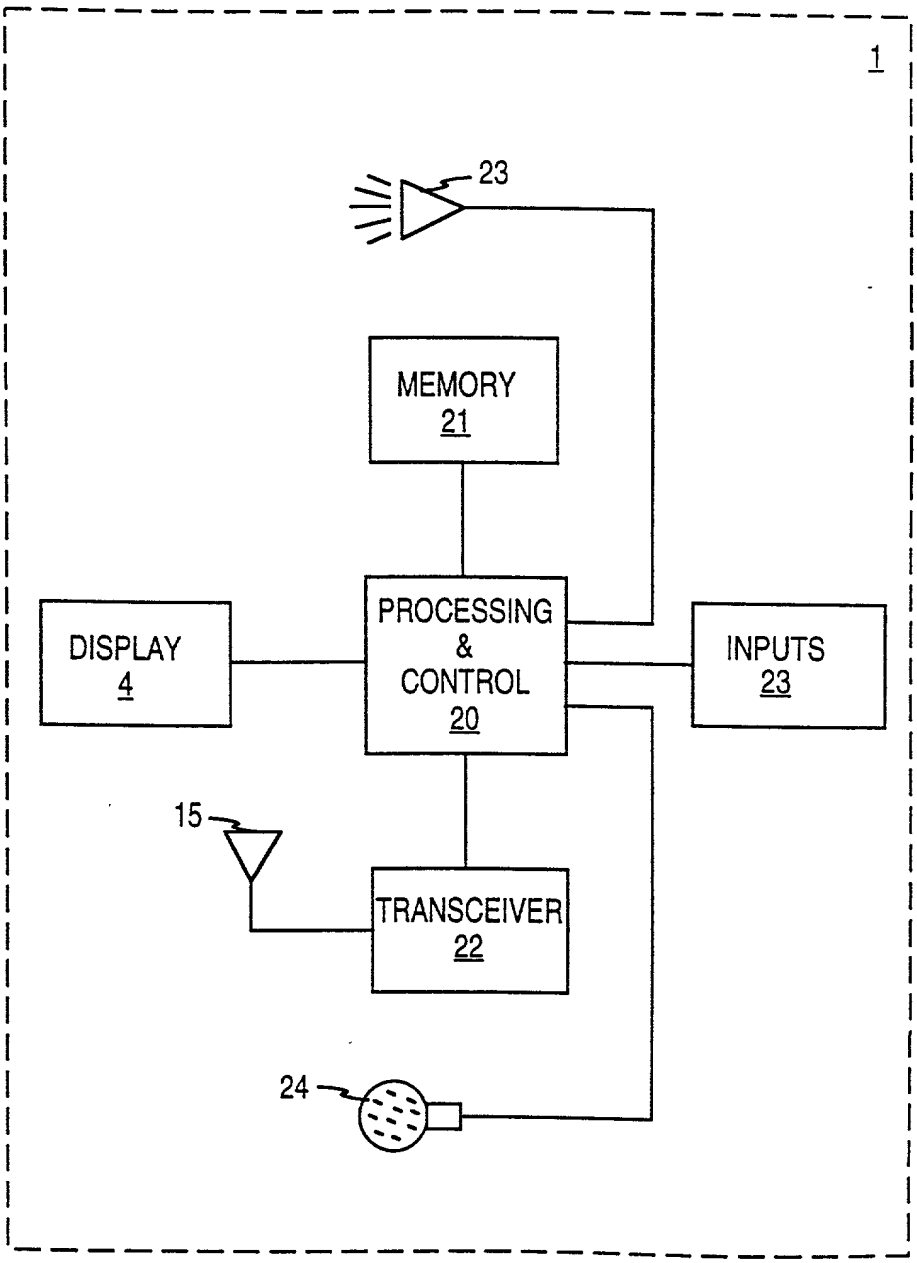
1
23
MEMORY
21
PROCESSING
&
CONTROL
20
DISPLAY
4
INPUTS
23
15
TRANSCEIVER
22
24

FIG. 2

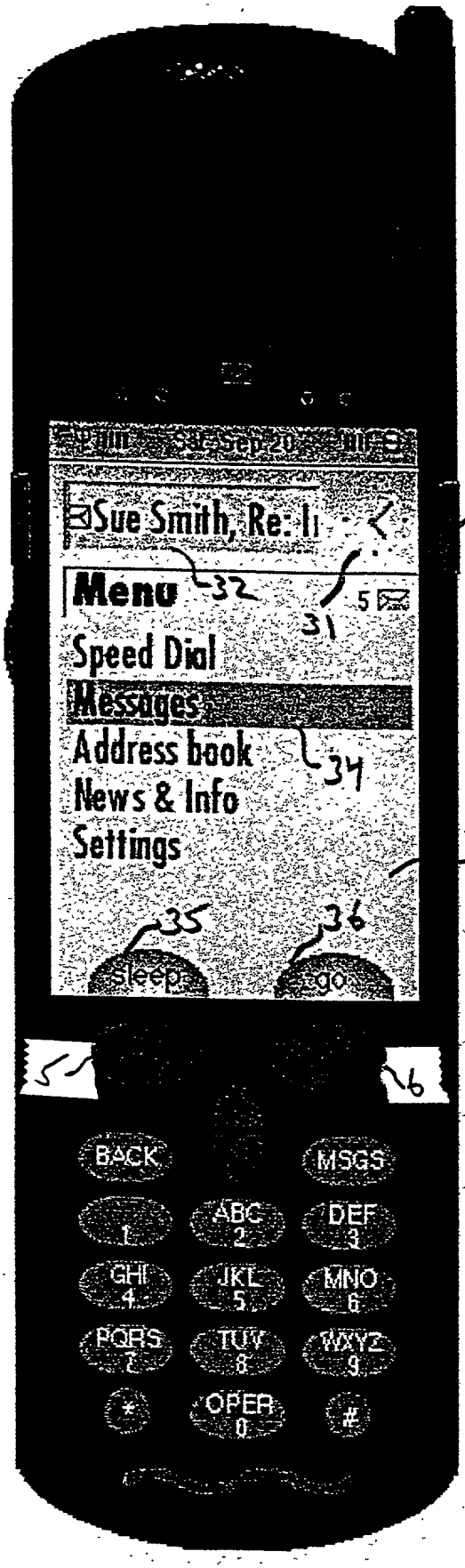

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FIG.3A

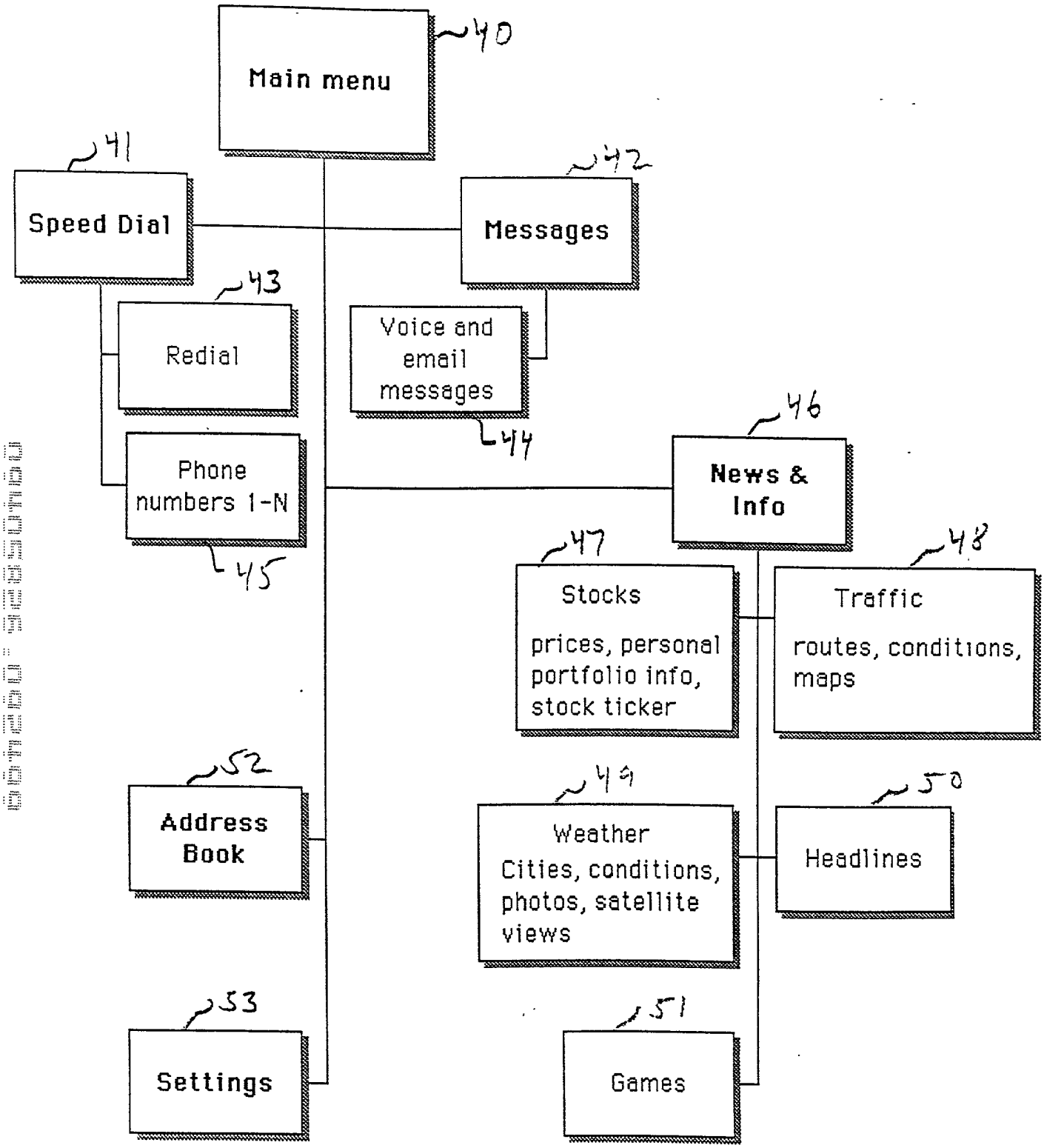
Main menu
40
Speed Dial
41
Messages
42
Redial
43
Voice and email messages
44
Phone numbers 1-N
45
News & Info
46
Stocks
prices, personal portfolio info, stock ticker
47
Traffic
routes, conditions, maps
48
Address Book
52
Weather
Cities, conditions, photos, satellite views
49
Headlines
50
Settings
53
Games
51

FIG.3B

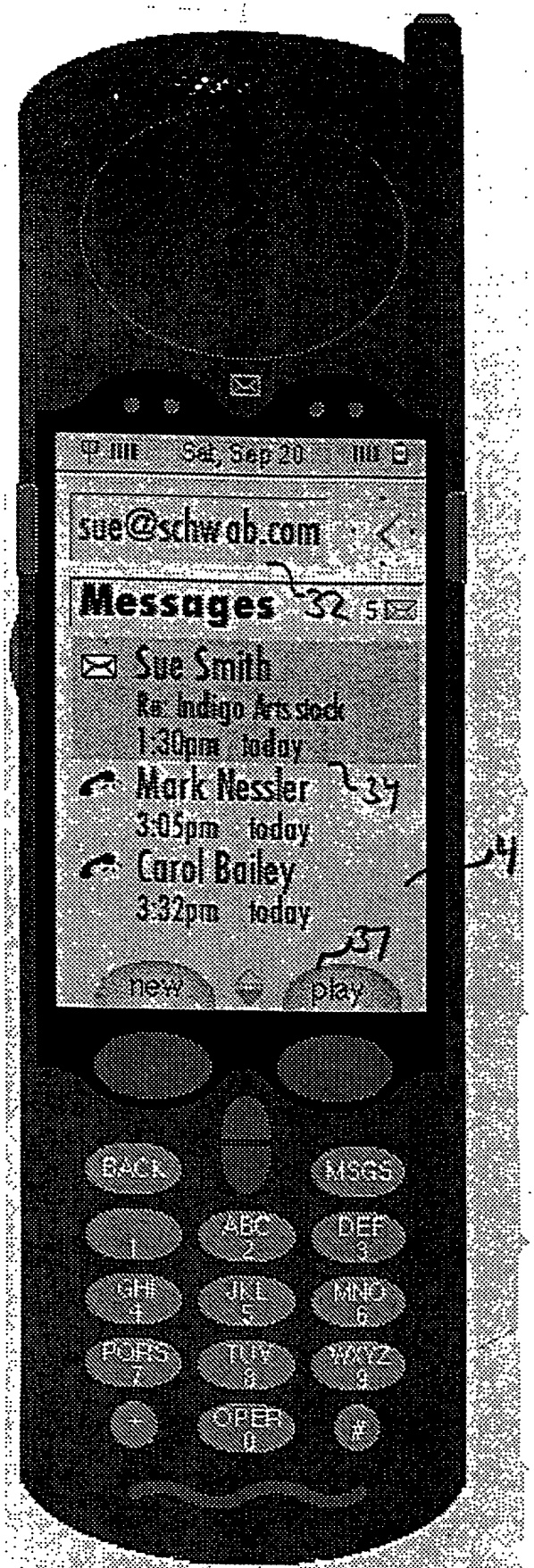

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FIG. 4

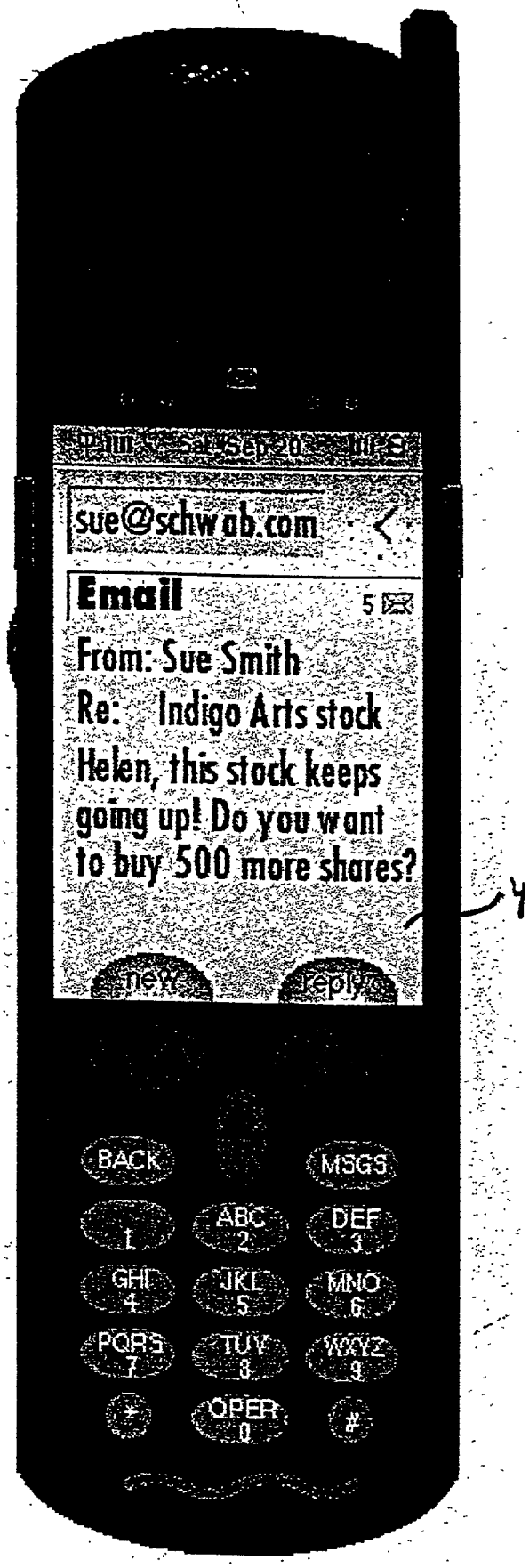

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FIG.5

FIG. 6

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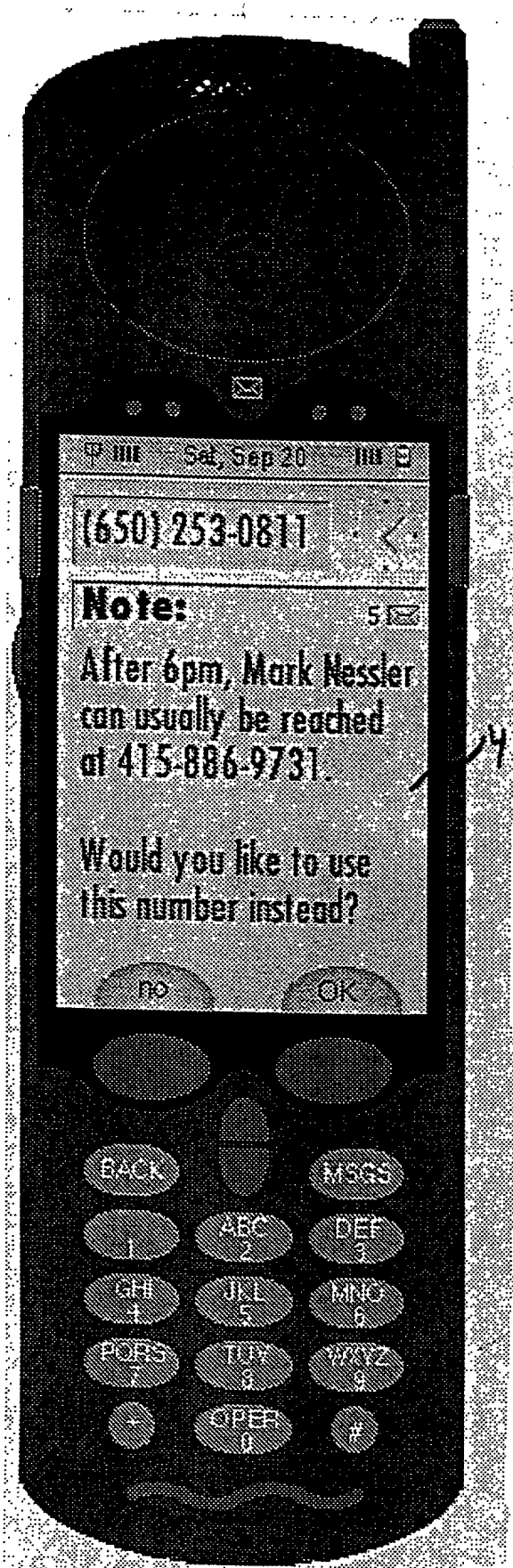

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FIG. 7

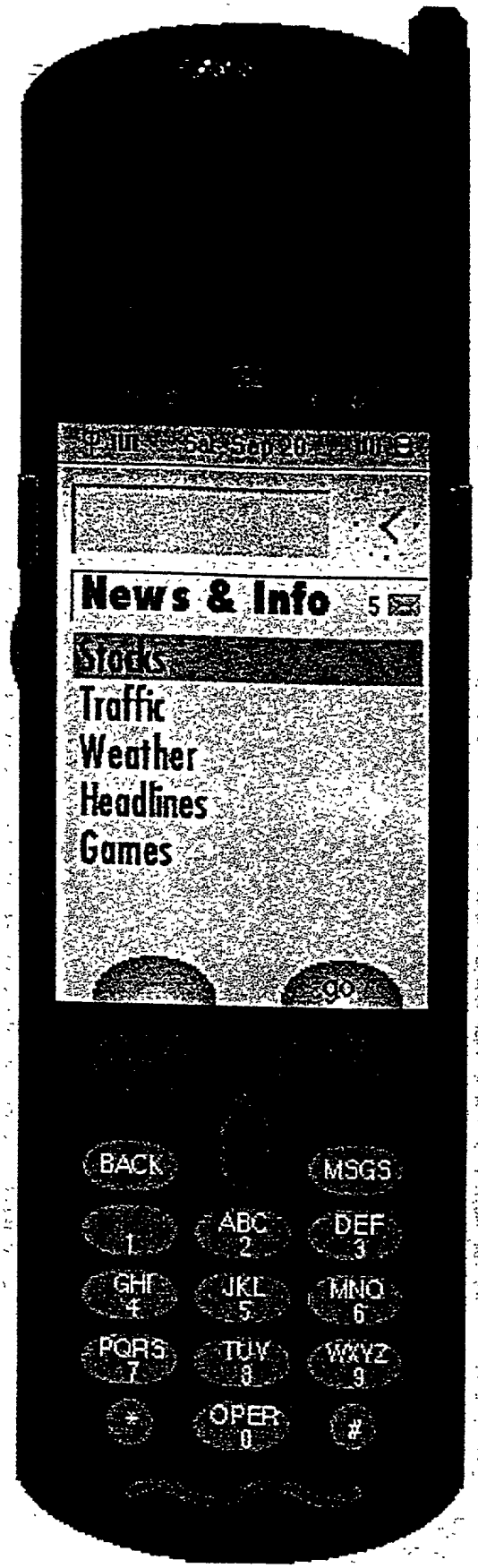

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FIG. 8

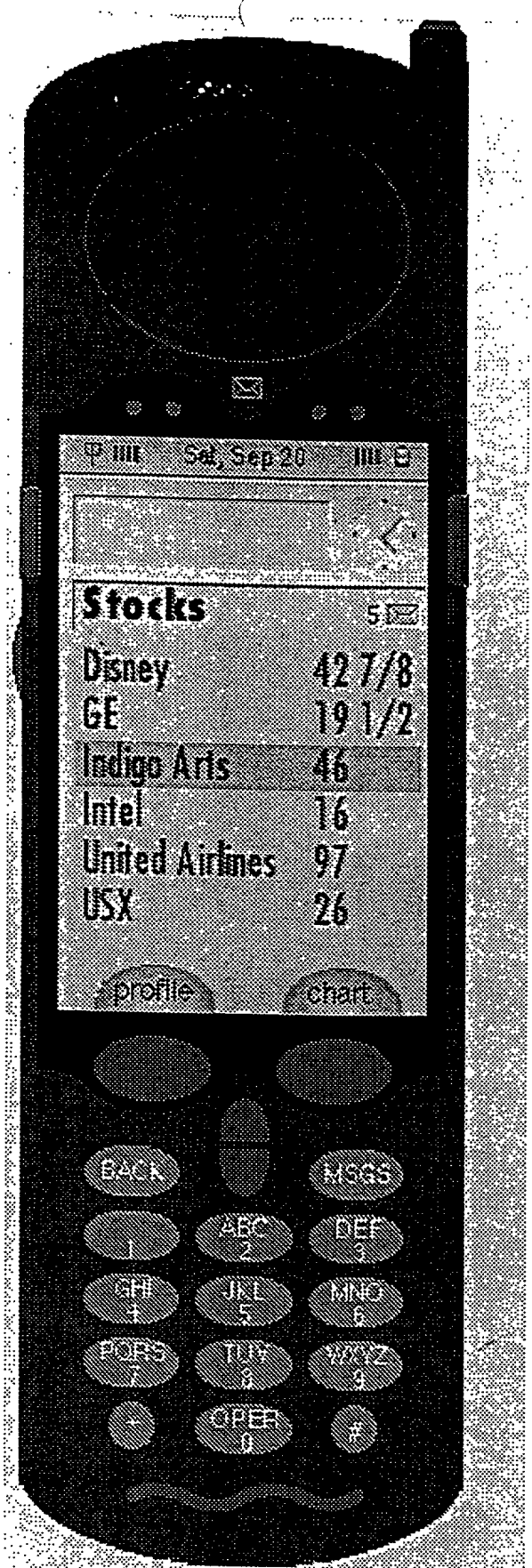

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FIG. 9

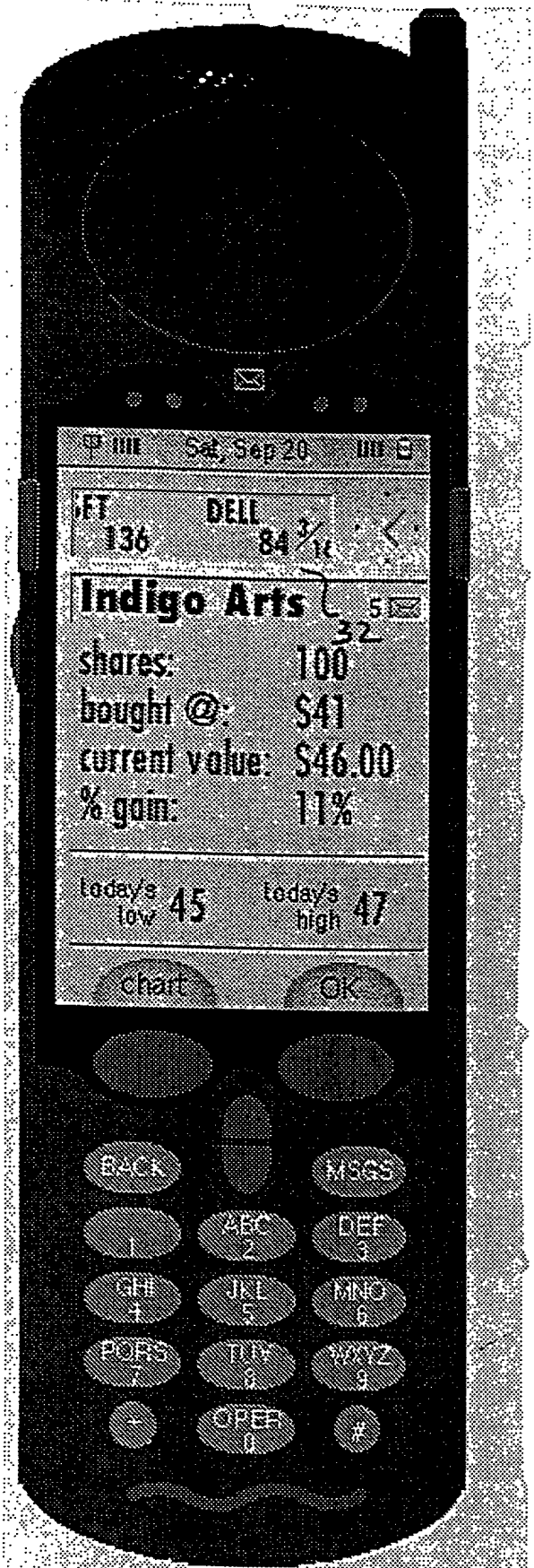

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FIG. 10

Our Docket No.: 082225.P2813

SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below, next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Graphical User Interface for a Portable Telephone

the specification of which

_____ is attached hereto.
_X____ was filed on _September 26, 1997_ as
Application Serial No. _08/938,378_____
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I do not know and do not believe that the same was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119, of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s) Priority Claimed

Number	Country	Day/Month/Year Filed	Yes	No
Number	Country	Day/Month/Year Filed	Yes	No

Number	Country	Day/Month/Year Filed	Yes	No

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

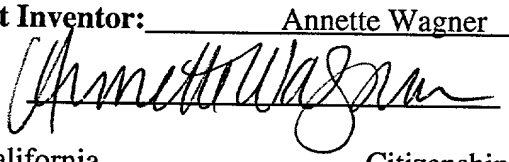
(Application Serial No.)	(Filing Date)	(Status -- patented, pending, abandoned)
(Application Serial No.)	(Filing Date)	(Status -- patented, pending, abandoned)

I hereby appoint William E. Alford, Reg.37,764; Farzad E. Amini, Reg. No. 42,261; Aloysius T. C. AuYeung, Reg. No. 35,432; William Thomas Babbitt, Reg. No. 39,591; Carol F. Barry, 41,600; Jordan Michael Becker, Reg. No. 39,602; Bradley J. Bereznak, Reg. No. 33,474; Michael A. Bernadicou, Reg. No. 35,934; Roger W. Blakely, Jr., Reg. No. 25,831; Gregory D. Caldwell, Reg. No. 39,926; Kent M. Chen, Reg. No. 39,630; Lawrence M. Cho, Reg. No. 39,942; Yong S. Choi, Reg. No. 43,324; Thomas M. Coester, Reg. No. 39,637; Roland B. Cortes, Reg. No. 39,152; Barbara Bokanov Courtney, Reg. No. P42,442; William Donald Davis, Reg. No. 38,428; Michael Anthony DeSanctis, Reg. No. 39,957; Daniel M. De Vos, Reg. No. 37,813; Tarek N. Fahmi, Reg. No. P41,402; James Y. Go, Reg. No. 40,621; Richard Leon Gregory, Jr., P42,607; Dinu Gruia, Reg. No. 42,996; David R. Halvorson, Reg. No. 33,395; Thomas A. Hassing, Reg. No. 36,159; James A. Henry, Reg. No. 41,064; Willmore F. Holbrow III, Reg No. P41,845; George W Hoover II, Reg. No. 32,992; Eric S. Hyman, Reg. No. 30,139; Dag H. Johansen, Reg. No. 36,172; William W. Kidd, Reg. No. 31,772; Tim L. Kitchen, Reg. No. P41,900; Michael J. Mallie, Reg. No. 36,591; Paul A. Mendonsa P42,879; Darren J. Milliken, P42,004; Thinh V. Nguyen, Reg. No. 42,034; Kimberley G. Nobles, Reg. No. 38,255; Michael A. Proksch P43,021; Babak Redjaian, Reg. No. 42,096; James H. Salter, Reg. No. 35,668; William W. Schaal, Reg. No. 39,018; James C. Scheller, Reg. No. 31,195; Anand Sethuraman, Reg. No. 43,351; Charles E. Shemwell, Reg. No. 40,171; Maria McCormack Sobrino, Reg. No. 31,639; Stanley W. Sokoloff, Reg. No. 25,128; Allan T. Sponseller, Reg. No. 38,318; Geoffrey T. Staniford, P43,151; Judith A. Szepesi, Reg. No. 39,393; Vincent P. Tassinari, Reg. No. 42,179; Edwin H. Taylor, Reg. No. 25,129; George G. C. Tseng, Reg. No. 41,355; Lester J. Vincent, Reg. No. 31,460; John Patrick Ward, Reg. No. 40,216; Stephen Warhola, P43,237; Charles T. J. Weigell, Reg. No. 43,398; Ben J. Yorks, Reg. No. 33,609; and Norman Zafman, Reg. No. 26,250; my attorneys; and Amy M. Armstrong, Reg. No. P42,265; Robert Andrew Diehl, Reg. No. P40,992; and Edwin A. Sloane, Reg. No. 34,728; my patent agents, with offices located at 12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025, telephone (310) 207-3800, and Kenneth Olsen, Reg. No. 26,493; Timothy J. Crean, Reg. No. 37,116; Philip J. McKay, Reg. No. 38,966; Robert S. Hauser, Reg. No. 37,847; Joseph T. FitzGerald, Reg. No., 33,881; Alexander E. Silverman, Reg. No., 37,940; and Christine S. Lam, Reg. No. 37,489; of Sun Microsystems, Inc., with full power of substitution and revocation, to

prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole/First Inventor: Annette Wagner

Inventor's Signature  Date 9-21-99

Residence Los Altos, California (City, State) Citizenship U.S.A. (Country)

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Los Altos, California 94022 U.S.A.

Full Name of Second/Joint Inventor: Jeffrey Herman

Inventor's Signature _____ Date _____

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Post Office Address 722 Channing Avenue
Palo Alto, California 94301 U.S.A.

Full Name of Third/Joint Inventor: Herbert Jellinek

Inventor's Signature _____ Date _____

Residence Aptos, California (City, State) Citizenship U.S.A. (Country)

Post Office Address 71715 Viewpoint Drive
Aptos, California 95003 U.S.A.

Full Name of Fourth/Joint Inventor: Susan Booker

Inventor's Signature _____ Date _____

Residence San Carlos, California (City, State) Citizenship U.S.A. (Country)

Post Office Address 147 Highland Avenue
San Carlos, CA 94070 U.S.A.

Our Docket No.: 082225.P2813

SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below, next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Graphical User Interface for a Portable Telephone

the specification of which

_____ is attached hereto.
_X_ was filed on _September 26, 1997_ as
Application Serial No. _08/938,378_____
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I do not know and do not believe that the same was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119, of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s) Priority Claimed

Number	Country	Day/Month/Year Filed	Yes	No
Number	Country	Day/Month/Year Filed	Yes	No

Number	Country	Day/Month/Year Filed	Yes	No

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing Date)	(Status -- patented, pending, abandoned)
(Application Serial No.)	(Filing Date)	(Status -- patented, pending, abandoned)

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prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole/First Inventor: Annette Wagner

Inventor's Signature _____ Date _____

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Full Name of Second/Joint Inventor: Jeffrey Herman

Inventor's Signature [signature] Date 9/18/99

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Full Name of Third/Joint Inventor: Herbert Jellinek

Inventor's Signature _____ Date _____

Residence Aptos, California (City, State) Citizenship U.S.A. (Country)

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Full Name of Fourth/Joint Inventor: Susan Booker

Inventor's Signature _____ Date _____

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Our Docket No.: 082225.P2813

SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below, next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Graphical User Interface for a Portable Telephone

the specification of which

_____ is attached hereto.
_X_ was filed on _September 26, 1997_ as
Application Serial No. _08/938,378_____
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I do not know and do not believe that the same was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119, of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s) Priority Claimed

Number	Country	Day/Month/Year Filed	Yes	No
Number	Country	Day/Month/Year Filed	Yes	No

Number	Country	Day/Month/Year Filed	Yes	No

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

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Full Name of Sole/First Inventor: Annette Wagner

Inventor's Signature _____ Date _____

Residence Los Altos, California (City, State) Citizenship U.S.A. (Country)

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Los Altos, California 94022 U.S.A.

Full Name of Second/Joint Inventor: Jeffrey Herman

Inventor's Signature _____ Date _____

Residence Palo Alto, California (City, State) Citizenship U.S.A. (Country)

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Palo Alto, California 94301 U.S.A.

Full Name of Third/Joint Inventor: Herbert Jellinek

Inventor's Signature [signature] Date 9/16/99

Residence Aptos, California (City, State) Citizenship U.S.A. (Country)

Post Office Address ~~71715~~ 7175 Hoj Viewpoint Drive
Aptos, California 95003 U.S.A.

Full Name of Fourth/Joint Inventor: Susan Booker

Inventor's Signature _____ Date _____

Residence San Carlos, California (City, State) Citizenship U.S.A. (Country)

Post Office Address 147 Highland Avenue
San Carlos, CA 94070 U.S.A.

Our Docket No.: 082225.P2813

SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below, next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Graphical User Interface for a Portable Telephone

the specification of which

_____ is attached hereto.
_X_ was filed on _September 26, 1997_ as
Application Serial No. _08/938,378_____
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I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I do not know and do not believe that the same was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application.

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